

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,556	08/18/2003	Jesse Dennis Wolfe	IL-11072	4907
7590 10/11/2005			EXAMINER	
James S. Tak			VERSTEEG, STEVEN H	
Assistant Laboratory Counsel Lawrence Livermore National Laboratory			ART UNIT	PAPER NUMBER
P.O. Box 808, L-703 Livermore, CA 94551			1753	
			DATE MAILED: 10/11/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	^/	•
	Application No.	Applicant(s)
	10/643,556	WOLFE ET AL.
Office Action Summary	Examiner	Art Unit
	Steven H. VerSteeg	1753
The MAILING DATE of this communication apperiod for Reply	pears on the cover sheet with	the correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.4 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICA 136(a). In no event, however, may a reply will apply and will expire SIX (6) MONTH: e. cause the application to become ABAN	TION. be timely filed from the mailing date of this communication. DONED (35 U.S.C. § 133)
Status		
Responsive to communication(s) filed on <u>26 A</u> This action is FINAL . 2b) ☐ This Since this application is in condition for alloware closed in accordance with the practice under A	s action is non-final. nce except for formal matters	
Disposition of Claims		
 4) Claim(s) 1-9,11,13-21 and 23 is/are pending in 4a) Of the above claim(s) is/are withdra 5) Claim(s) 1-9,11 and 13-21 is/are allowed. 6) Claim(s) 23 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or 	wn from consideration.	
Application Papers		•
9)☐ The specification is objected to by the Examine 10)☑ The drawing(s) filed on 18 August 2003 is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the Example 11.	a)⊠ accepted or b)⊡ object drawing(s) be held in abeyance tion is required if the drawing(s)	. See 37 CFR 1.85(a). is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Appl rity documents have been rec u (PCT Rule 17.2(a)).	lication No ceived in this National Stage
Attachment(s)		
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 		mary (PTO-413) lail Date mal Patent Application (PTO-152)

Application/Control Number: 10/643,556

Art Unit: 1753

DETAILED ACTION

Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 3. Claim 23 recites the limitation "said means for providing a reactant gas" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Response to Amendment

- 4. The objection to the drawings presented in the office action mailed January 12, 2005 is withdrawn in light of the amendment.
- 5. The objection to the specification presented in the office action mailed January 12, 2005 is withdrawn in light of the amendment.
- 6. The claim objections presented in the office action mailed January 12, 2005 are withdrawn in light of the amendment.
- 7. The 103(a) rejection of claims 1-24 over Scobey in view of Belkind presented in the office action mailed January 12, 2005 is withdrawn in light of Applicant's arguments.

Allowable Subject Matter

- 8. Claim, 1-9, 11, and 13-21 are allowed.
- 9. The following is a statement of reasons for the indication of allowable subject matter: it is neither anticipated nor obvious over the prior art of record to have a reactive magnetron sputter

Page 2

Art Unit: 1753

deposition process as claimed by Applicant in claim 13 or a reactive magnetron sputter deposition apparatus as claimed by Applicant in claim 1.

10. Scobey, as discussed by Applicant, does not have a reactant gas providing means "at" the target source and also does not direct the reactant gas to the target source. Modifying Scobey would involve tearing apart the reference to change the gas delivery method. It is particularly notable that Scobey introduces the inter gas at the target and the reactive gas away from the target. Thus, there is significance, a teaching away if you will, of providing the reactive gas away from the target in Scobey. Providing the reactive gas at the target, even if motivation existed, would not be obvious because Scobey teaching away from such a limitation.

General Information

For general status inquiries on applications not having received a first action on the merits, please contact the Technology Center 1700 receptionist at (571) 272-1700.

For inquiries involving Recovery of lost papers & cases, sending out missing papers, resetting shortened statutory periods, or for restarting the shortened statutory period for response, please contact Denis Boyd at (571) 272-0992.

For general inquiries such as fees, hours of operation, and employee location, please contact the Technology Center 1700 receptionist at (571) 272-1300.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven H. VerSteeg whose telephone number is (571) 272-1348. The examiner can normally be reached on Mon - Thurs (6:30 AM - 5:00 PM).

Art Unit: 1753

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven H VerSteeg Primary Examiner Art Unit 1753

shv October 3, 2005